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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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12/27/2001

Sylvie Jeannin

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

ZHAO, DAQUAN

ART UNIT

PAPER NUMBER

2633

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/029,812	Applicant(s) JEANNIN, SYLVIE	
	Examiner Daquan Zhao	Art Unit 2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/27/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/04/2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/24/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 6 is objected to because of the following informalities: the word "increasein" is misspelled. It is believed that the applicant means to type "increasing". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 19 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 19 recites "the apparatus of claim 10, wherein said processor is programmed to identify an indicator of at least two scene cuts in said uncompressed video data...". The "said uncompressed video data" in claim 10 is the input for the video encoder, which is the raw data transmitted from the transmitting source. Applicant fails to disclose how to identify an indicator of at least two scene cuts in said uncompressed video from the raw data in the specification. The examiner treated the "said uncompressed video data" as the uncompressed video data coming out of the decoder.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites "the method of claim 2, further comprising the step of identifying one of said separators as the ending of a commercial break when the gap between said one separator and a next separator is greater than said predetermined threshold value. (no: when the gap between the separator and the next one is greater than a predetermined threshold)". It is not clear what the applicant is trying to claim with the sentence in the parenthesis. The claim(s) must be in one sentence form only (see MPEP § 608.01(m)). Therefore, for examination purposes, the examiner is not taking the sentence in the parenthesis in consideration.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-11, 13-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Dimitrova et al (U.S 6,714,594)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

In regards to claims 1-9, Dimitrova et al teach a method for detecting commercials in a compressed video stream, the method comprising the step of:

- Compressing video data and generating compressed video data (e.g. Fig. 1, MPEG encoder 100, column 5, lines 9-15);
- Detecting a plurality of separators based on said generated compressed data, each of said separators is defined by at least two consecutive scene changes (e.g. abstract, using one or more features as indicators, and column 7, line 50-60);
- Determining the beginning and ending of commercial break among said plurality of separators by comparing a gap between said plurality of separators (e.g. abstracts, and column 11, line 44-59, and column 12, line 15-28).

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- Identifying one of said separators as the beginning of a commercial break when the gap between said one separator and a previous separator is greater than a predetermined threshold value (e.g. column 12, line 23-26).
- Identifying one of said separators as the ending of the commercial break when the gap between said one separator and a next separator is greater than said predetermined threshold value (e.g. column 12, line 23-26).
- Said plurality of separators is inserted into said video data at a transmitting source (e.g. column 8, line 10-12).
- Detecting said plurality of separators in said compressed video data includes identifying an abrupt increase in an average Mean Absolute Difference (MAD) value of said generated compressed data (e.g. column 4, line 28-30).
- Detecting said plurality of separators in said compressed video data is performed based on an increasing an average Mean Absolute Difference (MAD) value of said generated compressed data (e.g. column 6, 35-44).

In regards to claims 10-11, 13-18, Dimitrova et al teach an apparatus for detecting commercials in a compressed video stream, comprising:

- A video encoder for receiving uncompressed video data and generating compressed video data (e.g. figure 1, MPEG encoder 100, column 5, line 8-15);
- A detector for detecting a plurality of separators in said compressed video data (e.g. column 6, line 50-53, scene change detector);

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- A processor configured to edit said compressed video data by identifying the beginning and ending of a commercial break in said compressed video data (e.g. figure 1, content analyzer 120, column 5, line 48-61, marker result from content analyzer 120 for playback selector 130 to skip commercial); and
- A playback selector for editing said compression video data to skip said commercial break for a subsequent viewing (e.g. figure 1, playback selector 130, column 5, line 56-60).
- A memory for storing said compressed video data with the identification of the beginning and ending of said commercial break (e.g. figure 1, data store 110).
- Compressed video data includes an identifier of a presence of sequence of unicolor frames (e.g. column 8 line 10-12).
- Compressed video data includes an identifier of a transition between a television program and said commercial break (e.g. column 9, table I, and column 10, line 1-6).
- Compressed video data includes an identifier of a transition between the successive commercial programs (e.g. column 8, line 10-13, "commercials").
- Compressed video includes an identifier of at least two successive scene cuts (e.g. column 11, line 65-67, series of black frames).
- Detector detects said plurality of separators based on an abrupt change in an average Mean Absolute Difference (MAD) value of said generated compressed data (e.g. column 6, line 45-53).

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- Compressed video data includes at least one of a quantizer scale, motion vector data, bit rate data, a variation of luminance within a frame, a variation of color within a frame, a total luminance of a frame, a total color of a frame, change in luminance between frames, a mean absolute difference, and a quantizer scale (column 5, line 20-34).

5. **Claims 10 and 12** are rejected under 35 U.S.C. 102(e) as being anticipated by Christopher et al (WO 01/35409 A2).

In regards to claims 10 and 12, Christopher et al teach an apparatus for detecting commercials in a compressed video stream, comprising:

- A video encoder for receiving uncompressed video data and generating compressed video data (e.g. figure 1, Packet Video Encoder, 144, and page 6, line 23-27);
- A detector for detecting a plurality of separators in said compressed video data (e.g. page 11, line 27-32 and page 12, line 1-15);
- A processor configured to edit said compressed video data by identifying the beginning and ending of a commercial break in said compressed video data (e.g. page 17, line 14-18);
- A playback selector for editing said compressed video data to skip said commercial break for a subsequent viewing (e.g. page 18, line 1-6); and
- A decoder for generating decompressed video data (e.g. figure 1, Packet Video Decoder 178, and page 7, line 22-23).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Christopher et al as applied to claims 10 and 12 above, and further in view of Harville (US 6,993,245 B1).

Claim 19 is drawn to the apparatus of claim 10, wherein said processor is programmed to identify an indicator of at least two scene cuts in said uncompressed video data and to generate an identifier of the location in a sequence of said compressed video data coinciding with said indicator of at least two said scene cuts.

Christopher et al teach a processor is programmed to identify an indicator of at least two scene cuts in compressed video data (see discussion for claims 10 and 12 above). However, Christopher et al fail to teach the processor is programmed to identify an indicator of at least two scene cuts in uncompressed video data. Harville teaches a commercial detection method for either compressed or uncompressed audiovisual data (column, line 29-67 and column 6, line 1-32). Therefore, It would have been obvious for one ordinary skill in the art to incorporate the teaching disclosed by Christopher et al with the teaching disclosed by Harville for the same reason disclosed by Harville, which is to use the invention in a wide variety of application and purposes, for example

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conventional network television broadcasts, cable television broadcasts, television set-top boxes and digital VCRs (see Harville, column 3, line 11-24).

Conclusion

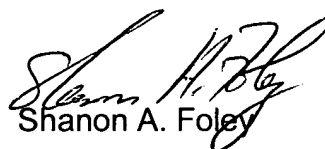
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Foley Shanon can be reached on (571) 272-0898. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daquan Zhao


Shanon A. Foley

Supervisory Patent Examiner